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(71) Applicant: HITACHI LTD

(72) Inventor: ENDO KIJU
ARAYA TAKESHI
HIOKI SUSUMU
HAYASHI MASAKATSU(54) GLASS HAVING TRANSPARENT FILM AND
METHOD FOR FORMING TRANSPARENT FILM
ON GLASS

(57) Abstract:

PURPOSE: To obtain the titled glass sharply decreasing heat absorption from outside at air-cooling and preventing clouding by efficiently absorbing inside heat, by forming transparent film reflecting ultraviolet and(or) infrared radiation on glass and by further forming hydrophilic transparent film on it.

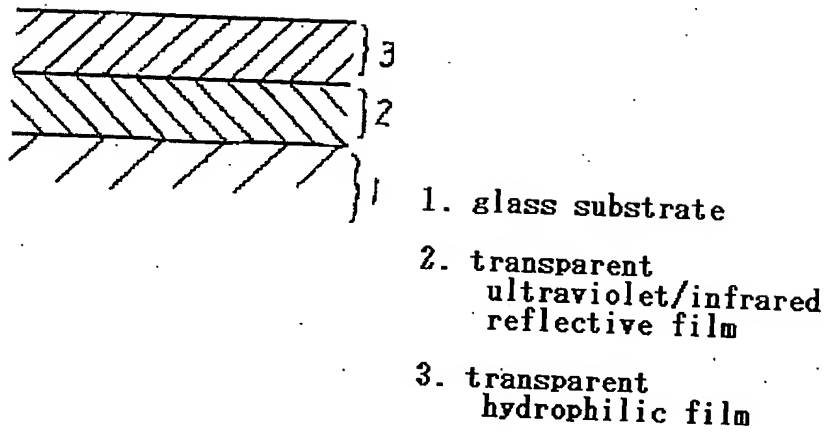
CONSTITUTION: The transparent film having characteristic of reflecting ultraviolet and(or) infrared radiation is formed on a glass substrate. The

transparent film consists of mixed corpuscle of two or more kinds of In_2O_3 , SnO_2 and Sb_2O_3 . Then, the targeted glass having transparent film is obtd. by further forming hydrophilic transparent film consisting of e.g. SiO_2 corpuscle on the transparent film above-mentioned. According to this invention, it is possible to reduce the capacity of cooling equipment, because of preventing an inflow of heat from the outside of window and besides, efficiently absorbing inside heat. On the other hand, frost and dew can be efficiently removed, because the glass becomes conductive at air-heating and can be used as a surface heater.

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by the water sheeting effect of
the hydrophilic transparent film.

Fig. 1



(Fig.1 is the cross sectional view of the present glass with films.)